

APERTURE MASKS FOR CIRCUIT FABRICATION

ABSTRACT

In various embodiments, the invention is directed to aperture mask deposition techniques for use in creating integrated circuits or integrated circuit elements. In other embodiments, the invention is directed to different apparatuses that facilitate the deposition techniques. The techniques generally involve sequentially depositing material through a number of aperture masks formed with patterns that define layers or portions of various layers of a circuit. In this manner, circuits can be created using aperture mask deposition techniques, without requiring any etching or photolithography, which is particularly useful when organic semiconductors are involved. The techniques can be useful in creating circuit elements for electronic displays, low-cost integrated circuits such as radio frequency identification (RFID) circuits, and other circuits.